

Application No. : 10/692,835
Filed : October 23, 2003

IN THE CLAIMS

Please amend Claims 1, 3, 19, 20, 29, 32, 60 and 63, and add new Claims 66-69 as
5 follows:

1. (Currently amended) Saddle pad apparatus adapted to support a saddle while
maintaining substantially unimpeded movement of the spinal column of a living subject,
comprising a first plurality of pads disposed laterally to one side of said spine and a second plurality
10 of pads disposed laterally to the other side of said spine so that said first and second plurality of
pads straddle said spinal column and are sufficiently distant therefrom so as not to impede
movement of the spinal column of said living subject, each of said pads being adapted to
individually cooperate with a specific feature of the anatomy of the living subject.

2. (Previously presented) The apparatus of Claim 1, wherein said specific features
15 comprise gaps or recesses in the subject's anatomy.

3. (Currently amended) The apparatus of Claim 2, wherein said first and second
pluralities of pads collectively comprise four discrete pads, two per side of the spine, and at least a
portion of said gaps or recesses are disposed in the withers region of the subject.

4. (Original) The apparatus of Claim 2, wherein at least one of said pads varies in
20 thickness.

5. (Previously presented) The apparatus of Claim 3, wherein at least a portion of said
plurality of pads are formed from a visco-elastic foam material.

6. (Original) The apparatus of Claim 2, wherein said plurality of pads are disposed in
pockets formed substantially between a first layer and a second layer of material.

25 7. (Original) The apparatus of Claim 6, wherein said plurality of pads are made
removable from said pockets via Velcro strips disposed at seams of said pockets.

8. (Previously presented) The apparatus of Claim 3, wherein said first layer and second
layer comprise sheepskin and a fiber-based material, respectively, said sheepskin being disposed to
contact the skin of said living subject, said fiber-based material being disposed to contact said
30 saddle.

9. (Original) The apparatus of Claim 1, wherein said living subject comprises an equine.

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10. (Original) The apparatus of Claim 1, wherein said apparatus is further adapted to mitigate rocking of said saddle back and forth on said living subject during riding.

11. (Original) The apparatus of Claim 4, wherein said apparatus is further adapted to mitigate rocking of said saddle back and forth on said living subject during riding based at least in part on said variation in thickness.

12.-18. (Cancelled)

19. (Currently amended) Saddle pad apparatus adapted to support a saddle on a living subject, comprising:

a plurality of pads that distribute load from said saddle substantially evenly on said living subject over only a plurality of non-contiguous regions of said living subject's anatomy such that during riding ~~such that~~ said saddle is substantially stable around a rotational axis transverse to the longitudinal axis of the spinal column of said subject.

20. (Currently amended) The apparatus of Claim 19, wherein said ~~apparatus comprises~~ a plurality of pads are disposed laterally to said spine.

21. (Previously presented) The apparatus of Claim 20, wherein said plurality comprises four discrete pads, two per side of the spine, each of said four pads being adapted to cooperate with a recess or gap within the anatomy of the subject.

22. (Original) The apparatus of Claim 20, wherein at least one of said pads varies in thickness.

23. (Original) The apparatus of Claim 20, wherein at least a portion of said plurality of pads are formed from a visco-elastic foam material.

24. (Original) The apparatus of Claim 20, wherein said plurality of pads are disposed in pockets formed substantially between a first layer and a second layer of material.

25. (Original) The apparatus of Claim 24, wherein said plurality of pads are made removable from said pockets via Velcro strips disposed at seams of said pockets.

26. (Original) The apparatus of Claim 24, wherein said first layer and second layer comprise sheepskin and a fiber-based material, respectively, said sheepskin being disposed to contact the skin of said living subject, said fiber-based material being disposed to contact said saddle.

27. (Original) The apparatus of Claim 19, wherein said living subject comprises an equine.

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28. (Original) The apparatus of Claim 19, wherein said apparatus is further adapted to support said saddle while maintaining substantially unimpeded movement of the spinal column of said living subject.

29. (Currently amended) A saddle pad adapted for use with a saddle on an equine, comprising:

first and second substantially flexible elements having roughly the same shape, said first and second elements being bound together in at least a plurality of locations along their periphery, said first element being in direct contact with the skin of said equine; and

a plurality of compressible foam pad elements disposed between said first and second flexibly elements, said pad elements straddling the spine of said equine and being disposed within said saddle pad and sufficiently distant from said spine such that the movement of the spine of said equine is substantially unimpeded by said saddle and said pad elements during riding,

wherein substantial weight redistribution of said saddle in a front-back direction is frustrated by said pad elements; and

wherein said unimpeded spine movement, said frustration of redistribution, and said first flexible element cooperate to provide reduced discomfort for said equine during said riding.

30. (Original) The saddle pad of Claim 29, wherein said first element comprises a thick sheepskin, and said foam elements comprise visco-elastic foam elements.

31. (Original) The saddle pad of Claim 29, further comprising at least one peripheral ridge disposed substantially along a front or back periphery of said first and second elements, said peripheral ridge cooperating with an edge of said saddle to substantially frustrate relative motion between said saddle pad and said saddle in at least one direction during riding.

32. (Currently amended) A saddle pad adapted for use, with a saddle, on an equine, comprising:

first and second substantially flexible elements having roughly the same shape, said first and second elements being bound together in at least a plurality of locations along their periphery, said first element being in direct contact with the skin of said equine;

a plurality of compressible foam pad elements disposed between said first and second flexibly flexible elements, a first portion of said plurality of pad elements having a first shape and a second portion of said plurality of said pad elements having a second shape, said pad elements straddling the spine of said equine and being disposed within said saddle pad and sufficiently

distant from said spine such that the movement of the spine of said equine is substantially unimpeded by said saddle and said pad elements during riding,

first and second restraining straps affixed to at least said second flexible element, said straps each being adapted for substantially concealed tethering to said saddle; and

5 at least one peripheral ridge disposed substantially along a front or back periphery of said first and second elements, said peripheral ridge cooperating with an edge of said saddle to substantially frustrate relative motion between said saddle pad and said saddle in at least one direction during riding;

wherein said pad elements having said first shape are adapted to interface with gaps formed
10 in the withers region of said animal, whereas said pad elements having said second shape are adapted to interface with gaps formed in the region of the animal directly under a rear portion of said saddle.

33.- 42. (Cancelled)

43. (Original) Tilt-inhibiting saddle pad apparatus, comprising:
15 a body element having a plurality of pockets formed therein;
a plurality of pad elements disposed within respective ones of said pockets; and
a contour element disposed within a respective one of said pockets, said contour element having physical properties adapted to cooperate with said pad elements and the anatomy of an animal on which said pad apparatus and a saddle are disposed to maintain said saddle in a
20 substantially constant orientation with respect to said animal.

44. - 52. (Cancelled)

53. (Previously presented) A pad element adapted for use in a saddle pad, wherein said pad element is formed from a substantially resilient material and is adapted for selective removal from said saddle pad by a user; and
25 wherein said pad element is particularly shaped to substantially accommodate a particular withers region artifact on the anatomy of an animal on which said pad element and saddle pad is utilized.

54. (Original) The pad element of Claim 53, wherein said resilient material comprises a visco-elastic foam.

30 55. (Original) The pad element of Claim 53, wherein said pad element has a plurality of densities associated therewith in its uncompressed state.

56. (Original) The pad element of Claim 55, wherein said plurality of densities are substantially stratified with respect to the width dimension of said element.

57. (Original) The pad element of Claim 53, wherein said pad element further comprises a plurality of substantially rounded edges.

5 58.-59. (Cancelled)

60. (Currently amended) Apparatus adapted for use on high-withered animals, comprising:

a substantially flexible pad having a plurality of features adapted to capture respective ones of pad elements;

10 a plurality of pad elements captured by respective ones of said features;

wherein said pad elements and said pad ~~are specifically adapted~~ cooperatively form a raised feature element to raise a frontal portion of a saddle disposed over top of said pad element with respect to a withers region in order to mitigate tilting or rocking of the saddle.

61. (Original) The apparatus of Claim 60, wherein said pad elements are formed from visco-elastic foam.

62. (Original) The apparatus of Claim 61, further comprising a pad interface adapted to interface between said pad and said animal, said pad interface adapted to (i) dissipate localized pressure; (ii) dissipate heat; and (iii) dissipate moisture.

63. (Currently amended) A coordinated riding system for use on an animal, comprising:

a pad retaining structure;

a plurality of pad elements that straddle the spinal column and are sufficiently distant from a spinal column of said animal so as to not impede movement thereof during animal ambulation, said plurality of pad elements being retained by said structure and adapted to provide a

25 substantially uniform distribution of pressure and withers support; and

an interface element disposed between said animal and said pad elements, said interface element being adapted to provide substantial pressure dissipation, moisture dissipation, and thermal dissipation.

64. (Previously presented) The system of Claim 63, wherein said retaining structure comprises a saddle pad, and said pad elements comprise four visco-elastic foam pads, two of said pads being disposed at or near the withers region of said animal and configured to cooperate

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with gaps present in the anatomy of said animal at said withers region to provide said withers support.

65. (Original) The system of Claim 64, wherein said interface element comprises a sheepskin layer with hair-side disposed facing the hide of said animal.

5 66. (New) Saddle pad apparatus adapted to support a saddle on a living subject, comprising:

 a plurality of first pads disposed in a forward region of said apparatus, at least one of said plurality of first pads being disposed substantially laterally on each of the two sides of a spinal column of said living subject;

10 a plurality of second pads disposed in a rear region of said apparatus, at least one of said plurality of second pads being disposed substantially laterally on each of the two sides of a spinal column of said living subject;

 wherein said first and second pads cooperate to distribute load from said saddle on said living subject over a plurality of non-contiguous regions of said living subject's anatomy such that during riding such that said saddle is substantially stable around a rotational axis transverse to the longitudinal axis of the spinal column of said subject.

15 67. (New) The apparatus of Claim 66, wherein said living subject comprises an equine, and said first and second pads have first and second shapes respectively, said first shape being adapted to fit substantially within the withers region of said equine and support at least a portion of the front of said saddle.

20 68. (New) The apparatus of Claim 67, wherein said second shape is substantially wedge-shaped, and adapted to support at least a portion of the rear of said saddle.

 69. (New) Saddle pad apparatus adapted to support a saddle on a high-withered equine, comprising:

25 a plurality of first pads disposed in a forward region of said apparatus, at least one of said plurality of first pads being disposed substantially laterally on each of the two sides of a spinal column of said equine yet not interfering therewith;

 a plurality of second pads disposed in a rear region of said apparatus, at least one of said plurality of second pads being disposed substantially laterally on each of the two sides of a spinal column of said equine yet not interfering therewith;

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wherein said first and second pads cooperate to distribute load from said saddle on said equine over a plurality of non-contiguous regions of said equine's anatomy such that during riding such that said saddle is substantially stable against unwanted tilting in the forward-back direction; and

- 5 said first pads are adapted to fit substantially within the withers region of said equine and support at least a portion of the front of said saddle.